

Amendments to the Claims:

The listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claims 1-21 (Canceled).

Claim 22. (New) A method of treating a tumor caused by hypermethylation of nucleic acids, consisting essentially of the steps of
administering an effective amount of 5-chloro-2'-deoxycytidine and an effective amount of a cytidine deaminase inhibitor to a subject,
and then exposing the subject to an effective level of radiation.

Claim 23. (New) The method of claim 22, wherein the tumor is selected from the group consisting of a tumor of the breast, lung, brain, liver, kidney, ovary, uterus, testis, pancreas, gastrointestinal tract, head and neck, nasopharynx, skin, and prostate.

Claim 24. (New) The method of claim 22, wherein 5-chloro-2'-deoxycytidine and the cytidine deaminase inhibitor are administered in a slow release formulation.

Claim 25. (New) The method of claim 22, wherein the cytidine deaminase inhibitor is tetrahydrouridine, deoxytetrahydrouridine, a pyrimidin-2-one nucleoside, a 5-fluoropyrimidin-2-one nucleoside, a diazepam-2-yl-nucleoside, 1-(2-Deoxy-2-fluoro- β -D-arabinofuranosyl)-1,2-dihydropyrimidin-2-one, 2'-Deoxy-2'-F-arabazepine, diazepamone, 4-hydroxymethyl-2-oxypyrimidin-2-one nucleoside, or 2'-fluoro-2'-deoxyarabinosyl-tetrahydrouacil.

Claim 26. (New) The method of claim 22, wherein the cytidine deaminase inhibitor is tetrahydrouridine or zebularine.

Claim 27. (New) The method of claim 22, wherein the cytidine deaminase inhibitor is tetrahydrouridine.

Claim 28. (New) The method of claim 22, wherein said subject is a human.

Claim 29. (New) The method of claim 22, wherein the radiation is selected from the group consisting of radiation from protons as a radiation source, radiation from a radiation source implanted proximal to the tumor, radiation from a radionuclide attached to monoclonal antibodies, radiation in a gamma knife, 3D conformal radiation, and radiation in stereotactic radiosurgery.

Claim 30. (New) The method of claim 28, wherein said radiation source implanted proximal to the tumor comprises yttrium 90 needles or indium needles.

Claim 31. (New) The method of claim 28, wherein said radionuclide is yttrium 90.

Claim 32. (New) A method of treating a tumor caused by hypermethylation of nucleic acids, comprising the steps of
administering an effective amount of 5-chloro-2'-deoxycytidine and an effective amount of a cytidine deaminase inhibitor to a subject,
and then exposing the subject to an effective level of radiation,
wherein none of PALA, FdC, 4-N-methyl FdC and FdU is administered to the patient.

Claim 33. (New) The method of claim 32, wherein the tumor is selected from the group consisting of a tumor of the breast, lung, brain, liver, kidney, ovary, uterus, testis, pancreas, gastrointestinal tract, head and neck, nasopharynx, skin, and prostate.

Claim 34. (New) The method of claim 32, wherein 5-chloro-2'-deoxycytidine and the cytidine deaminase inhibitor are administered in a slow release formulation.

Claim 35. (New) The method of claim 32, wherein the cytidine deaminase inhibitor is tetrahydrouridine, deoxytetrahydrouridine, a pyrimidin-2-one nucleoside, a F pyrimidin-2-one nucleoside, a diazepin-2-1-nucleoside, 1-(2-Deoxy-2-fluoro- β -D arabinofuranosyl)-1,2-dihydropyrimidin-2-one, 2'-Deoxy-2'-F-arazebularine, diazoepinone, 4-hydromethyl-2-oxopyrimidin-2-one nucleoside, or 2'-fluoro-2'-deoxyarabinosyl-tetrahydrouracil.

Claim 36. (New) The method of claim 32, wherein the cytidine deaminase inhibitor is tetrahydrouridine or zebularine.

Claim 37. (New) The method of claim 32, wherein the cytidine deaminase inhibitor is tetrahydrouridine.

Claim 38. (New) The method of claim 32, wherein said subject is a human.

Claim 39. (New) The method of claim 32, wherein the radiation is selected from the group consisting of radiation from protons as a radiation source, radiation from a radiation source implanted proximal to the tumor, radiation from a radionuclide attached to monoclonal antibodies, radiation in a gamma knife, 3D conformal radiation, and radiation in stereotactic radiosurgery.

Claim 40. (New) The method of claim 38, wherein said radiation source implanted proximal to the tumor comprises yttrium 90 needles or indium needles.

Claim 41. (New) The method of claim 38, wherein said radionuclide is yttrium 90.

Claim 42. (New) The method of claim 32, wherein 5-chloro-2'-deoxycytidine and a cytidine deaminase are the only tumor therapeutic agents administered.